

Field Rainwater Harvesting and Conservation for Improved Dryland Production of Vegetables

BACKGROUND

South Africa is predominantly an arid to semi-arid country, characterized by low and erratic rainfall (less than 500 mm on average annually), high atmospheric evaporative demand and poor soil fertility. As a result, crop production is constrained particularly under dryland conditions. The implementation of improved management practices can considerably increase crop productivity under such conditions. These include practices that maximize crop water availability through minimization of wasteful water losses such as soil evaporation, runoff and deep percolation. This can be achieved through the implementation of field rainwater harvesting and conservation techniques.

FIELD RAINWATER HARVESTING AND CONSERVATION TECHNIQUES

In-situ rainwater harvesting



In-field rainwater harvesting



Mulching application for soil water conservation



AUTHORS:

Dr Nadia Araya – IbraimoN@arc.agric.za

Dr Hintsa Araya - ArayaH@arc.agric.za

Mr Manaka Makgato - MakgatoM@arc.agric.za

Dr Stephen Amoo - AmooS@arc.agric.za

Dr Christian du Plooy - IduPlooy@arc.agric.za